

### **REMARKS**

Reconsideration and allowance of the subject patent application are respectfully requested.

Applicant thanks the Examiner for considering the Applicant's arguments filed October 1, 2009 and for withdrawing the previous rejections. In the latest office action, new rejections are based on a combination of MacCarter (U.S. Publication No. 2002/0082867) and various other prior art documents.

Applicant does not acquiesce in these rejections or in the characterizations of the applied references made in the office action. For example, the independent claims variously recite trend analysis of data with reference to trends tuned to each patient's characteristics. In the office action, the Examiner comments that MacCarter discloses trend analysis with reference to trends tuned to each patient's characteristics (paragraphs [0083]-[0091]), but Applicant respectfully submits that this is not quite correct. Although MacCarter refers to trend analysis in these paragraphs, the trends are not tuned to each patient's characteristics. Instead paragraph [0083] refers to comparing the data against "models derived from historical profiles." This is not the same as a trend tuned to a particular patient. The illustrated example embodiments described in the subject patent application utilize a Kalman filter to perform trend analysis and this means that the trend analysis is particular to that individual patient. The patient is not being compared to a group of other patients, but to their own specific condition over the preceding days or weeks. Iliff, West, Anthony, Baker Jr. and Ginter also lack trend analysis tuned to a specific patient's characteristics and Applicant believes, therefore, that the cited prior art does not disclose or make obvious this feature.

In addition, the independent claims have been amended to provide even more distinctions over MacCarter and the other applied references as explained below.

MacCarter is concerned with a patient monitoring device which utilizes patient-wearable sensors for continuous monitoring of the patient. This is illustrated in Figures 11 and 12 of MacCarter. It is primarily concerned with serious conditions such as congestive heart failure where close and continuous monitoring of the patient's condition is necessary. As the Examiner correctly points out, the measurements from the patient-wearable sensors are collected by an "aggregation node" based in the patient's house, and the aggregation node then sends data to a

wireless data center. Medical professionals can, of course, access the data in the wireless data centre. Thus, the Examiner is correct that this relates, in general terms, to a telemedicine system.

However, on studying the MacCarter system in detail, Applicant realizes that there is a significant difference between the claims and the MacCarter system. The MacCarter system is, essentially, a system that requires the patient to be passive, simply wearing the sensors. The gathering of data is automatic. The claimed systems and methods, on the other hand, involve the patient in an active role. Thus, in an illustrative example, the patient has to switch on the measuring device, switch on the cellular telephone, start the software application and then take the reading. Although this may seem like a step backwards, Applicant's example system is intended for long-term chronic conditions and it has been found that involving the patient in an active role (albeit a role not requiring any particular medical knowledge) improves the patient's sense of well-being by making them feel in control of their own health. This, in turn, means that patients tend to keep using the system and do not lose interest.

The independent claims are amended to emphasize this active role of the patient by specifying those features of the system which provide this advantage. These amendments find support throughout the disclosure (see, e.g., page 3, lines 14-23; and Figure 2)

In more detail, the independent claims require that the electronic physiological data acquisition unit is activated by the patient and is under the control of the patient. MacCarter lacks this feature. In MacCarter the patient is just required to wear the sensor, but has no control over it.

The independent claims also require that the wireless transmitter (e.g. cellular telephone) is activated by the patient and starts a software application to receive the output data from the data acquisition unit and automatically to transmit it to the remote server. Again, this is not true of MacCarter. MacCarter lacks the feature that the wireless transmission is activated by the patient. It also lacks the feature that data acquisition and transmission is by a software application which starts on activation of the device by the patient. Instead, in MacCarter, the patient has no control over the data gathering process, which is automatic.

The independent claims also specify that the software application is terminatable/terminated (e.g., by the patient following receipt of the feedback (automated response)) and that the electronic physiological data acquisition unit is deactivatable/deactivated

(e.g., by the patient). MacCarter lacks these features, and deliberately lacks them because MacCarter is concerned with continuous monitoring of a serious health condition. MacCarter would specifically not want the patient to be able to terminate the data gathering process.

In the office action, the Examiner also cites Iliff and West in combination with the rejection of the independent claims. Neither Iliff nor West discloses the features added to the independent claims relating to the active role of the patient.

Iliff discloses a question and answer based medical diagnostic expert system. Thus it is, in essence, for providing automated diagnosis of patients' conditions. It can operate over a telephone or via a computer. However it does not relate to a patient themselves utilizing a measurement device and wireless transmission device under their own control to monitor their own condition.

West also relates to a patient monitoring system, but this is configured to collect patient vital signs data in a hospital and the patient is, again, regarded as passive. In fact the system of West would work for patients who are unconscious. As emphasized above, the applicant system is designed to give patients an active role.

Therefore no combination of West or Iliff with MacCarter arrives at the subject-matter of the amended independent claims.

Anthony, Baker Jr. and Ginter are applied in connection with certain of the dependent claims. Among other things, these references do not remedy the deficiencies of MacCarter, Iliff and West with respect to the independent claims.

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Reconsideration and favorable office action are respectfully requested.

Respectfully submitted,

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